

		1				50
	1	HHNGTNGTMM	QYFEWHL PND	GNHWNRLRDD	ASNLRNRGIT	AIWIPPAWKG
5	2	..NGTNGTMM	QYFEWYLPND	GNHWNRLRSD	ASNLKDKGIS	AVWIPPAWKG
	3	HHNGTNGTMM	QYFEWYLPND	GNHWNRLRDD	AANLKSKGIT	AVWIPPAWKG
	4	....VNGTLM	QYFEWYTPND	GQHWKRLQND	AEHLSDIGIT	AVWIPPAYKG
	5	..ANLNGTLM	QYFEWYMPND	GQHWRRRLQND	SAYLAEHGIT	AVWIPPAYKG
	6	.AAPFNGTMM	QYFEWYLPDD	GTLWTKVANE	ANNLSSLGIT	ALWLPPAYKG
10						
		51				100
	1	TSQNDVG YGA	YDLYDLGEFN	QKGTVRTKYG	TRSQLES A IH	ALKNNGVQVY
	2	ASQNDVG YGA	YDLYDLGEFN	QKGTIRTKY G	TRNQLQA AVN	ALKSNGIQVY
	3	TSQNDVG YGA	YDLYDLGEFN	QKGTVRTKY G	TRNQLQA AVT	SLKNNGIQVY
15	4	LSQSDNG YGP	YDLYDLGEFQ	QKGTVRTKY G	TKSELQDA IG	SLHSRNVQVY
	5	TSQADVG YGA	YDLYDLGEFH	QKGTVRTKY G	TKGELQSA IK	SLHSRDIN VY
	6	TSRSDVG YGV	YDLYDLGEFN	QKGTVRTKY G	TKAQYLQA IQ	AAHAAGMQVY
		101				150
20	1	GDVVMNHKGG	ADATENVLAV	EVNPNNRNQE	ISGDYTIEAW	TKFDFPGRGN
	2	GDVVMNHKGG	ADATEMVRAV	EVNPNNRNQE	VSGEYTIEAW	TKFDFPGRGN
	3	GDVVMNHKGG	ADGTEIVNAV	EVNRSNRNQE	TSGEYAIEAW	TKFDFPGRGN
	4	GDVVLNHKAG	ADATEDVTAV	EVNPNARNQE	TSEYQIKAW	TDFRFPGRGN
	5	GDVVINH KGG	ADATEDVTAV	EVDPADRN RV	ISGEHLIKAW	THFHFPGRGS
25	6	ADVVF D HKGG	ADGTEWVDAV	EVNPSDRNQE	ISGTYQIQAW	TKFDFPGRGN
		151				200
	1	TYSDFKWRWY	HFDGVDWDQS	RQFQNRIYKF	RGDGKA WDWE	VDSNGNYDY
	2	THSNFKWRWY	HFDGVDWDQS	RKLNNRIYKF	RGDGKGWDWE	VDTENGN YDY
30	3	NHSSF KWRWY	HFDGTDWDQS	RQLQNKIYKF	RGTGKA WDWE	VDTENGN YDY
	4	TYSDFKWHWY	HFDGADWDES	RKI.SRIFKF	RGEGKA WDWE	VSSNGNYDY
	5	TYSDFKWHWY	HFDGTDWDES	RKL.NRIYKF	..QGKA WDWE	VSNENGN YDY
	6	TYSSF KWRWY	HFDGVDWDES	RKL.SRIYKF	RGIGKA WDWE	VDTENGN YDY

35

Figure 1(a)

5	201					250
	1	LMYADVDMDH	PEVVNELRRW	GEWYTNTLNL	DGFRIDAVKH	IKYSFTRDWL
	2	LMYADIDMDH	PEVVNELRNW	GVWYTNTLGL	DGFRIDAVKH	IKYSFTRDWS
	3	LMYADVDMDH	PEVIHELNRW	GVWYTNTLNL	DGFRIDAVKH	IKYSFTRDWL
	4	LMYADVDYDH	PDVVAETKKW	GIWYANELSL	DGFRIDAAKH	IKFSFLRDWV
10	5	LMYADIDYDH	PDVAAEIKRW	GTWYANELQL	DGFRLDAVKH	IKFSFLRDWV
	6	LMYADLMDH	PEVVTELKNW	GKWYVNTTNI	DGFRLDAVKH	IKFSFFPDWL
	251					300
	1	THVRNATGKE	MFAVAEFWKN	DLGALENYLN	KTNWNHVSVD	VPLHYNLYNA
15	2	IHVRSATGKN	MFAVAEFWKN	DLGAIENYLN	KTNWNHVSVD	VPLHYNFYNA
	3	THVRNTTGKP	MFAVAEFWKN	DLGAIENYLN	KTSWNHSAFD	VPLHYNLYNA
	4	QAVRQATGKE	MFTVAEYWQN	NAGKLENYLN	KTSFNQSVFD	VPLHFNQAA
	5	NHVREKTGKE	MFTVAEYWQN	DLGALENYLN	KTNFNHVSVD	VPLHYQFHAA
	6	SYVRSQTGKP	LFTVGEYWSY	DINKLHNYIT	KTDGTMSLFD	APLHNKFYTA
20	301					350
	1	SNSGGNYDMA	KLLNGTVVQK	HPMHAUTFVD	NHDSQPGESE	ESFVQEWFKP
	2	SKSGGNYDMR	QIFNGTVVQR	HPMHAUTFVD	NHDSQPGEAL	ESFVEEWFKP
	3	SNSGGYYDMR	NILNGSVVQK	HPTHAVTFVD	NHDSQPGEAL	ESFVQQWFKP
25	4	SSQGGGYDMR	RLLDGTVVSR	HPEKAVTFVE	NHDTQPGQSL	ESTVQTFWFKP
	5	STQGGGYDMR	KLLNGTVVSK	HPLKSVTFVD	NHDTQPGQSL	ESTVQTFWFKP
	6	SKSGGAFDMR	TLMTNTLMKD	QPTLAVTFVD	NHDTEPGQAL	QSWVDPWFKP
	351					400
30	1	LAYALILTRE	QGYPVVFYGD	YYGIPTHS..	.VPAMKAKID	PILEARQNFA
	2	LAYALTLTRE	QGYPVVFYGD	YYGIPTHG..	.VPAMKSKID	PILEARQKYA
	3	LAYALVLTRE	QGYPVVFYGD	YYGIPTHG..	.VPAMKSKID	PLLQARQTFA
	4	LAYAFILTRE	SGYPQVFYGD	MYGKTGTSPK	EIPSLKDNIE	PILKARKEYA
	5	LAYAFILTRE	SGYPQVFYGD	MYGKTGDSQR	EIPALKHKIE	PILKARKQYA
35	6	LAYAFILTRQ	EGYPCVFYGD	YYGIPQYN..	.IPSLKSKID	PLLIARRDYA
	401					450
	1	YGTQHDYFDH	HNIIGWTREG	NTTHPNISGLA	TIMSDGPGGE	KWMYVGQNKA
	2	YGRQN.....	.....	.....	.....	.....
40	3	YGTQHDYFDH	HDIIGWTREG	NSSHPNISGLA	TIMSDGPGGN	KWMYVGKNKA
	4	YGPQHDYIDH	PDVIGWTREG	DSSAAKISGLA	ALITDGPGGS	KRMYAGLKNA
	5	YGAQHDYFDH	HDIIGWTREG	DSSVANISGLA	ALITDGPGGA	KRMYVGRQNA
	6	YGTQHDYLDH	SDIIGWTREG	GTEKPGISGLA	ALITDGPGGS	KWMYVGKQHA

45

Figure 1 (b)

```

      451                                     500
5   1   GQVWHDITGN KPGTVTINAD GWANFSVNGG SVSIWVKR.. .....
    2   .....
    3   GQVWRDITGN RTGTVTINAD GWGNFSVNGG SVSVWVKQ.. .....
    4   GETWYDITGN RSDTVKIGSD GWGEFHVNDG SVSIYVQ... .....
    5   GETWHDITGN RSEPVINSE  GWGEFHVNGG SVSIYVQR.. .....
10  6   GKVFDLTGN RSDTVTINSD GWGEFKVNGG SVSVWVPRKT TVSTIARPIT

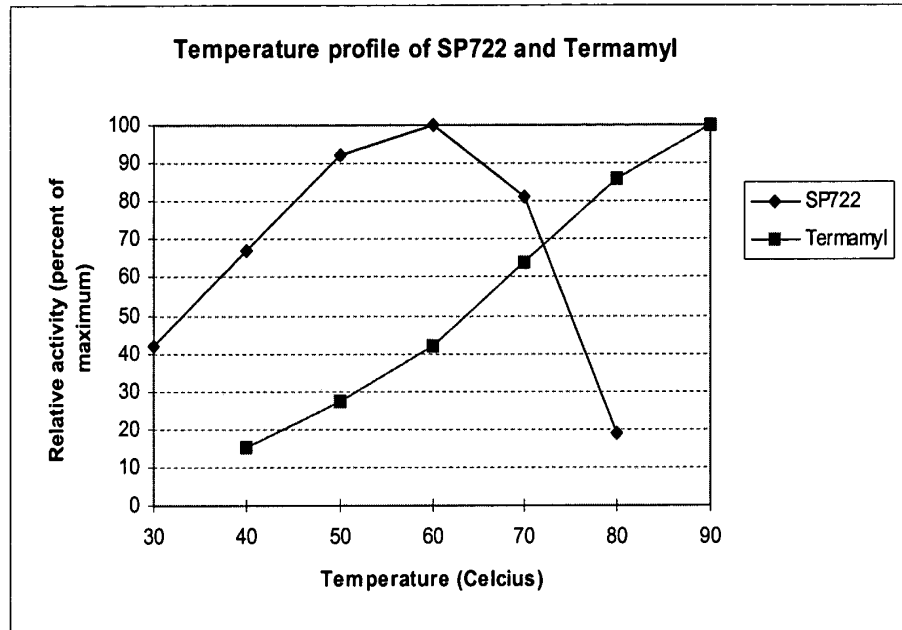
      501                                     519
    1   .....
    2   .....
15  3   .....
    4   .....
    5   .....
    6   TRPWTGEFVR WTEPRLVAW

```

20

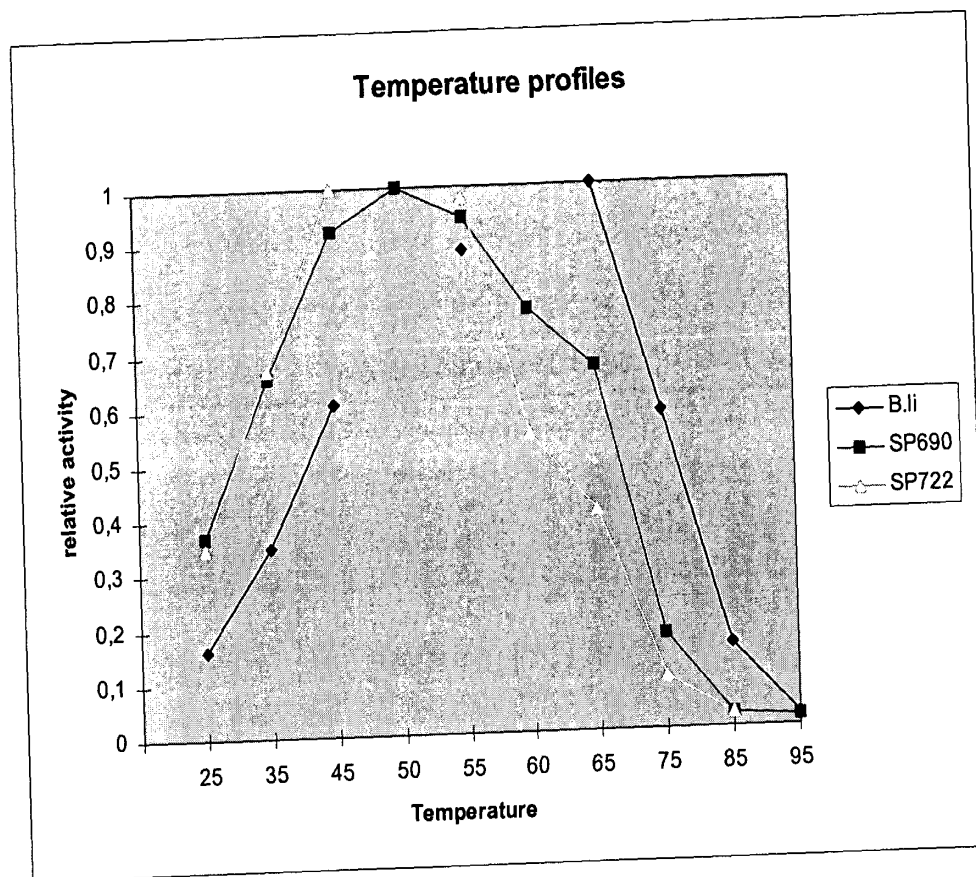
Figure 1 (c)

5



10

Figure 2 (b)



5

Figure 3

	1					50
5	1	MKFVLLLSLI	GFCWAQYDPH	TSDG.RTAIV	HLFEWRWVDI	AKECERYLAP
	2	.....LLSLI	GFCWAQYDPH	TADG.RTAIV	HLFEWRWADI	AKECERYLAP
	3	.....	.....QYAPQ	TQSG.RTDIV	HLFEWRWVDI	ALECERYLGP
	4	MKFVLLLSFTI	GFCWAQYSPN	TQQG.RTSIV	HLFEWRWVDI	ALECERYLAP
10	5	MKLNKIITTA	GLSLGLLLPS	IATATPTTFV	HLFEWNWQDV	AQECEQYLGP
	51					100
	1	KGFGGVQVSP	PNENVVHNP	SRPWWERYQP	ISYKICTRSG	NEDEFDRDMVT
	2	KGFGGVQVSP	PNENIIINNP	SRPWWERYQP	ISYKICSRSG	NENEFKDMVT
	3	KGFGGVQVSP	PNENVVVTNP	SRPWWERYQP	VSYKLCTRSG	NENEFDRDMVT
15	4	KGFGGVQVSP	PNENVAIYNP	FRPWWERYQP	VSYKLCTRSG	NEDEFDRMVT
	5	KGYAAVQVSP	PNEHI....T	GSQWWTRYQP	VSYELQSRGG	NRAQFIDMVN
	101					150
	1	RCNNVGVRIY	VDAVINHMC	AGNPAGTSST	CGSYLNPNNR	EFPAVPYSAW
20	2	RCNNVGVRIY	VDAVINHMC	SGNSAGTHST	CGSYFNPNNR	EFSAPVYSAW
	3	RCNNVGVRIY	VDAVINHMC	SGAAAGTGTT	CGSYCNPGNR	EFPAVPYSAW
	4	RCNNVGVRIY	VDAVINHMC	NAVSAGTSST	CGSYFNPGSR	DFPAVPYSGW
	5	RCSAAGVDIY	VDTLINHM..	.AAGSGTGTA	GNSF...GNK	SFPI..YSPQ
25	151					200
	1	DFNDNKC..	.GEIDNYNDA	YQVRNCRLTG	LLDLALEKDY	VRTKVADYMN
	2	YFNDNKC..	.GEINNYNDA	NQVRNCRLSG	LLDLALDKDY	VRTKVADYMN
	3	DFNDGKCKTA	SGGIESYNDP	YQVRDCQLVG	LLDLALEKDY	VRSMIADYLN
	4	DFNDGKCKTG	SGDIENYNDA	TQVRDCRLTG	LLDLALEKDY	VRSKIAEYMN
30	5	DFHES.CTIN	NSDYG..NDR	YRVQNCVLVG	LADLDTASNY	VQNTIAAYIN
	201					250
	1	HLIDIGVAGF	RLDAAKHMWP	RDIAVLDKL	HNLNTKWFSQ	GSRPFIQEV
	2	NLIDIGVAGF	RLDAAKHMWP	GDIKAVLDKL	HNLNTKWFSQ	GSRPFIQEV
35	3	KLIDIGVAGF	RLDASKHMWP	GDIKAVLDKL	HNLNTNWFP	GSRPFIQEV
	4	HLIDIGVAGF	RLDASKHMWP	GDIKAILDKL	HNLNSNWFP	GSKPFIQEV
	5	DLQAIGVKGF	RFDASKHVAA	SDIQSLMAKV	N.....	.GSPVVFQEV
	251					300
40	1	IDLGGEAIKG	SEYFGNGRVT	EFKYGAKLGT	VIRKWNGEKM	SYLKNWGEKW
	2	IDLGGEAIKG	SEYFGNGRVT	EFKYGAKLGT	VIRKWNGEKM	SYLKNWGEKW
	3	IDLGGEAIKS	GEYFSNGRVT	EFKYGAKLGT	VVRKWSGEKM	SYLKNWGEKW
	4	IDLGGEPIKS	SDYFGNGRVT	EFKYGAKLGT	VIRKWNGEKM	SYLKNWGEKW
45	5	IDQGGEAVGA	SEYLSTGLVT	EFKYSTELGN	TFR...NGSL	AWLSNFGGEW
	301					350
	1	GLVPSDRALV	FVDNHDNQRG	HGAGGSSILT	FWDARMYKMA	VGFMLAHPYG
	2	GFVPTDRALV	FVDNHDNQRG	HGAGGASILT	FWDARMYKMA	VGFMLAHPYG
	3	GFMPSDRALV	FVDNHDNQRG	HGAGGSSILT	FWDAYRKLVA	VGFMLAHPYG
50	4	GFVPSDRALV	FVDNHDNQRG	HGAGGASILT	FWDARLYKMA	VGFMLAHPYG
	5	GFMPSSSAVV	FVDNHDNQRG	HGGAG.NVIT	FEDGRLYDLA	NVFMLAYPYG
	351					400
	1	FTRVMSSYRW	NRNFQNGKDQ	NDWIGPPNNN	GVTKEVTINA	DTTCGNDWVC
55	2	FTRVMSSYRR	TRNFQNGKDV	NDWIGPPNNN	GVTKEVTINP	DTTCGNDWVC
	3	FTRVMSSYRW	ARNFVNGEDV	NDWIGPPNNN	GVIKEVTINA	DTTCGNDWVC
	4	FTRVMSSYRW	PRQFQNGNDV	NDWVGPPNNN	GVIKEVTINP	DTTCGNDWVC
60	5	YPKMSSY..	..DFHGDTDA	GGPNVPVHNN	GNLE.....	..CFASNWKC

Fig. 4 (a)

	401		450
5	1 EHRWRQIRNM VAFRNVVNGQ .PFSNWWDDN SNQVAFSRGN RGFIVFNDD		
	2 EHRWRQIRNM VAFRNVVNGQ .PFANWWDDN SNQVAFSRGN RGFIVFNDD		
	3 EHRWRQIRNM VAFRNVVNGQ .PFANWWDDN SNQVAFSRGN RGFIVFNDD		
	4 EHRWRQIRNM VAFRNVVNGQ .PFTNWWDDN SNQVAFSRGN RGFIVFNDD		
	5 EHRWSYIAGG VDFRNTADN WAVTNWWDDN NNQISFGRGS SGHMAINKE		
10	451		500
	1 WALSATLQTG LPAGTYCDVI SGDKVDG..N CTGLRVNVGS DGKAHFSISN		
	2 WALSSTLQTG LPAGTYCDVI SGDKVNG..N CTGLKVVNVGS DGKAHFSISN		
	3 WQLSSTLQTG LPAGTYCDVI SGDKVGN..S CTGIKVVNVGS DGKAHFSISN		
	4 WSFSLTLQTG LPAGTYCDVI SGDKING..N CTGIKIYVSD DGKAHFSISN		
15	5 STLTVQTD MASGQYCNVL KGELSADAKS CSGEVITVNS DGTINLNIGA		
	501		521
	1 SAEDPFIAIH ADSKL.....		
	2 SAEDPFIAIH ADSKL.....		
20	3 SAEDPFIAIH AESKL.....		
	4 SAEDPFIAIH AESKL.....		
	5 WDA...MAIH KNAKLNTSSA S		

Fig. 4 (b)